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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/610,492	06/30/2003	Sean Hayes	MS1-1548US	5386
22801	7590	07/17/2007		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER BULLOCK, JOSHUA	
			ART UNIT 2169	PAPER NUMBER
			MAIL DATE 07/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/610,492

Applicant(s)

HAYES ET AL.

Examiner

Joshua Bullock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-32, 34-42 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-32, 34-42 and 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This action is in response to arguments and remarks filed on April 13, 2007, in which claims 1-17, 19-32, 34-42, & 44-47 are presented for further examination.
2. Claims 1-17, 19-32, 34-42, & 44-47 are rejected.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 45-47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded

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on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10, 12, 14-17, 19-28, 30-32, 34-42, & 44-47 are rejected under 35 U.S.C. 102(b) as being unpatentable over "SMIL 2.0 XML for Web Multimedia", hereinafter referred to as SMIL.

In respect to Claim 1, SMIL discloses:

- **a method performed by a computer comprising:**
 - referencing one or more multimedia objects through a first set of one or more elements** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **associating the first set of one or more elements with a second set of one or more elements** (SMIL discloses (pg. 81, heading "Temporal composites") the seq element, which

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associates with child seq elements. The parent element and child element are indicative of first and second sets of one or more elements.)

- **arranging the second set of one or more elements to indicate timing for the multimedia objects referenced by the first set of one or more elements** (SMIL discloses (pg. 81, heading "Temporal composites") that the seq element is a timing elements, further disclosed is that the seq element indicates that its children play in sequence.)

As per Claim 2, SMIL discloses:

- **the referencing is performed by pointers in the first set of one or more elements that point to the multimedia objects** (SMIL discloses (pg. 79, heading "Media Content") referencing of objects through elements, wherein it is apparent that this referencing must be accomplished by pointers.)

As per Claim 3, SMIL discloses:

- **the referencing and associating are performed by the same document** (SMIL discloses (pg. 81, heading "Temporal composites") referencing of objects with seq element in which these objects are associated by the same document.)

As per Claim 4, SMIL discloses:

- **the arranging is performed through a time container that defines the second set of one or more elements** (SMIL

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discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

As per Claim 5, SMIL discloses:

- **the time container is defined by SMIL conventions** (pg. 81, heading "Temporal composites")

As per Claim 6, SMIL discloses:

- **the time container defines that the elements of the second set of one or more elements are rendered at the same time** (SMIL discloses (pg. 81, heading "Temporal composites") the par element specifying elements starting at the same time, wherein the a time container specifies timing arrangements.)

As per Claim 7, SMIL discloses:

- **the time container defines that the elements of the second set of one or more elements are rendered one after another in an ordered list** (SMIL discloses (pg. 81, heading "Temporal composites") the seq element specifying elements be played sequentially or "one after another".)

As per Claim 8, SMIL discloses:

- **the time container defines that the elements of the second set of one or more elements are rendered exclusive of one another** (SMIL discloses (pg. 82, heading "Linking") the

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excl element, wherein elements are rendered exclusive of one another.)

As per Claim 9, SMIL discloses:

- **rendering of the multimedia objects based on the arranging of the second set of one or more elements** (SMIL discloses (pg. 81, heading "Temporal composites") that the seq element is a timing elements, further disclosed is that the seq element indicates that its children play in sequence. Objects are played based on the arrangement of elements.)

As per Claim 10, SMIL discloses:

- **associating the second set of one or more elements with a third set of one or more elements** (SMIL discloses (pg. 81, heading "Temporal composites") the seq element, which associates with child seq elements. The parent element and child element are indicative of multiple sets of one or more elements, which are associated through parent/child relationships.)

As per Claim 12, SMIL discloses:

- **the first and second documents are written in XML** (SMIL discloses (pg. 78, column 2, pg. 81, column 1) use of XML to write documents.)

As per Claim 14, SMIL discloses:

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- **receiving an input to initiate an event affecting an element in the first set of one or more elements and providing a proxy element in the second set of elements that is configured to reference application of the event** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)

As per Claim 15, SMIL discloses:

- **the arranging is performed through a time container that defines the second set of one or more elements** (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

As per Claim 16, SMIL discloses:

- **the time container is defined by SMIL conventions** (SMIL discloses (pg. 81, headings "Temporal composites" & "Timing attributes" time containers defined by SMIL conventions.)

As per Claim 17, SMIL discloses:

- **a multimedia device that performs the method of claim 1** (FIG. 1 illustrates a device for performing the methods of SMIL.)

In respect to Claim 19, SMIL discloses:

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- **a method performed by a computer comprising:**
referencing one or more multimedia objects through a first set of one or more elements in a first document (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **associating the first set of one or more elements in the first document to a second set of one or more elements in a second document** (SMIL discloses (pg. 81, heading "Temporal composites") the seq element, which associates with child seq elements. The parent element and child element are indicative of first and second sets of one or more elements.)
- **arranging the second set of one or more elements of the second document to indicate timing for the multimedia objects referenced by the first set of one or more elements in the first document** (SMIL discloses (pg. 81, heading "Temporal composites") that the seq element is a timing element, further disclosed is that the seq element indicates that its children play in sequence.)

As per Claim 20, SMIL discloses:

- **the referencing is performed by pointers in the first set of one or more elements in the first document that point to**

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the one or more multimedia objects (SMIL discloses (pg. 79, heading "Media Content") referencing of objects through elements, wherein it is apparent that this referencing must be accomplished by pointers.)

As per Claim 21, SMIL discloses:

- **the arranging is performed through a time container that defines the second set of one or more elements** (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

As per Claim 22, SMIL discloses:

- **the time container is defined by SMIL conventions** (pg. 81, heading "Temporal composites")

As per Claim 23, SMIL discloses:

- **the time container defines that the elements of the second set of one or more elements are rendered at the same time** (SMIL discloses (pg. 81, heading "Temporal composites") the par element specifying elements starting at the same time, wherein the a time container specifies timing arrangements.)

As per Claim 24, SMIL discloses:

- **the time container defines that the elements of the second set of one or more elements are rendered one after**

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another in an ordered list (SMIL discloses (pg. 81, heading “Temporal composites”) the seq element specifying elements be played sequentially or “one after another”.)

As per Claim 25, SMIL discloses:

- **the time container defines that the elements of the second set of one or more elements are rendered exclusive of one another** (SMIL discloses (pg. 82, heading “Linking”) the excl element, wherein elements are rendered exclusive of one another.)

As per Claim 26, SMIL discloses:

- **associating the second set of one or more elements in the second document to a third set of one or more elements in a third document** (SMIL discloses (pg. 81, heading “Temporal composites”) the seq element, which associates with child seq elements. The parent element and child element are indicative of multiple sets of one or more elements, which are associated through parent/child relationships.)

As per Claim 27, SMIL discloses:

- **the first, second, and third documents are written in XML** (SMIL discloses (pg. 78, column 2, pg. 81, column 1) use of XML to write documents.)

As per Claim 28, SMIL discloses:

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- **the first and second documents are written in XML** (SMIL discloses (pg. 78, column 2, pg. 81, column 1) use of XML to write documents.)

As per Claim 30, SMIL discloses:

- **receiving an input to initiate an event affecting an element in the first set of one or more elements of the first document and providing a proxy element in the second document that is configured to reference initiation of the event** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)

As per Claim 31, SMIL discloses:

- **the arranging is performed through a time container that defines the second set of one or more elements in the second document** (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

As per Claim 32, SMIL discloses:

- **a multimedia device that performs the method of claim 19** (FIG. 1 illustrates a device for performing the methods of SMIL.)

As per Claim 34, SMIL discloses:

- **a multimedia device comprising: a processor; and instructions stored in a memory and executable on the processor configured to associate a first document with a second document through a first set of elements in the first document and a second set of elements in the second document** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **wherein the first set of elements reference multimedia objects and the second set of elements are arranged to provide a rendition timing for the multimedia objects** (SMIL discloses (pg. 81, heading "Temporal composites") the seq element, which associates with child seq elements. The parent element and child element are indicative of first and second sets of one or more elements.) (SMIL discloses (pg. 81, heading "Temporal composites") that the seq element is a timing elements, further disclosed is that the seq element indicates that its children play in sequence.)

As per Claim 35, SMIL discloses:

- **the rendition timing is a time container** (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

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As per Claim 36, SMIL discloses:

- **the time container is defined by SMIL conventions** (SMIL discloses (pg. 81, headings "Temporal composites" & "Timing attributes" time containers defined by SMIL conventions.)

As per Claim 37, SMIL discloses:

- **the instructions are further configured to associate a third set of elements in a third document with the second set of elements in the second document** (SMIL discloses (pg. 81, heading "Temporal composites") the seq element, which associates with child seq elements. The parent element and child element are indicative of multiple sets of one or more elements, which are associated through parent/child relationships.)

As per Claim 38, SMIL discloses:

- **the instructions are further configured to receive an event initiating input and inform the second document of occurrence of the event** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)

As per Claim 39, SMIL discloses:

- **the instructions are further configured to associate the first set of elements in the first document with a third set of elements in a third document** (SMIL discloses (pg. 81,

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heading "Temporal composites") the seq element, which associates with child seq elements. The parent element and child element are indicative of multiple sets of one or more elements, which are associated through parent/child relationships.)

In respect to Claim 40, SMIL discloses:

- **one or more computer-readable media carrying data structures comprising: a first content document formatted in a textual markup language having tagged elements that reference one or more multimedia objects** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **a timing document formatted in a textual markup language having a plurality of tagged elements** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **at least some of the tagged elements of the timing document referencing the elements of the first content document** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)

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- **the tagged elements of the timing document specifying rendition timings for the multimedia objects referenced by the tagged elements of the first content document (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)**

As per Claim 41, SMIL discloses:

- **the rendition timings are defined by time containers (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)**

As per Claim 42, SMIL discloses:

- **a second content document formatted in a textual markup language having tagged elements that reference the tagged elements of the first content document (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)**

In respect to Claim 44, SMIL discloses:

- **one or more computer-readable media carrying data structures comprising: a first document formatted in a textual markup language having a plurality of tagged elements responsive to events (SMIL discloses (pg. 79,**

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- heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **a second document formatted in a textual markup language having a plurality of tagged elements** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
 - **at least some of the tagged elements of the second document referencing the events affecting the tagged elements of the first document** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
 - **wherein the tagged elements of the second document specify rendition timings for multimedia objects that are referenced by the tagged elements of the first document** (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

In respect to Claim 45, SMIL discloses:

- **a system comprising: a broadcast point providing multimedia objects; and a multimedia device that receives the multimedia objects** (FIG. 1 illustrates a device for performing the methods of SMIL.)

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- **a first document that references the multimedia objects, and second document that provides rendition timing for the multimedia objects** (SMIL discloses (pg. 81, heading "Temporal composites") a seq and par element, which are timing elements, wherein these timing elements are time containers.)

As per Claim 46, SMIL discloses:

- **the multimedia device further receives an input that initiates an event in the first document, and informs the second document** (FIG. 1 illustrates a device for performing the methods of SMIL.)

As per Claim 47, SMIL discloses:

- **the multimedia device further receives a third document referenced by the second document** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **reading at least a subset of audio content comprising an audio file from optical media removably integrated with an optical drive** (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)
- **analyzing at least the read subset of audio content to quantify optical drive read accuracy; and generating one**

or more metrics of optical drive read accuracy based, at least in part, on the analysis of the read subset of audio content (SMIL discloses (pg. 79, heading "Media Content") referencing of multimedia objects, also disclosed are elements video, audio and text.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11, 13, & 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMIL as applied to claim 1 above, and further in view of "Integrating SMIL Timing into other XML-Based Languages", hereinafter referred to as SMIL99.

As per Claim 11, SMIL does not explicitly disclose:

- **the referencing is performed by a first document and the associating is performed by a second document**

SMIL99 discloses:

- **the referencing is performed by a first document and the associating is performed by a second document (SMIL99**

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discloses (pg. 2, background section, paragraph 2) separate documents for referencing and associating.)

- It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of SMIL99 into the method of SMIL. One of ordinary skill in the art would be motivated to allow documents to control other documents for increased flexibility.

As per Claim 13, SMIL does not explicitly disclose:

- **the first document is written in XML, and the second document is a style sheet**

SMIL99 discloses:

- **the first document is written in XML, and the second document is a style sheet** (SMIL99 discloses (pg. 2, background section) documents written in XML and defining by another language XHTML, and CSS based style sheet.)
- It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of SMIL99 into the method of SMIL. One of ordinary skill in the art would be motivated to allow documents to be written in XML and in CSS for increased flexibility.

As per Claim 29, SMIL does not explicitly disclose:

- **the first document is written in XML, and the second document is a style sheet**

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SMIL99 discloses:

- **the first document is written in XML, and the second document is a style sheet**

Response to Arguments

The previous non-final office action has been withdrawn due to the inclusion of 35 U.S.C. 101 rejection which was not discussed in the previous office action.

Further after considering applicant's arguments, examiner has formulated new grounds of rejection corresponding to claims 11, 13, 19-31, 34-42, & 44-47.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Bullock whose telephone number is 571-270-1395. The examiner can normally be reached on 7:30am-5pm EST M-F.

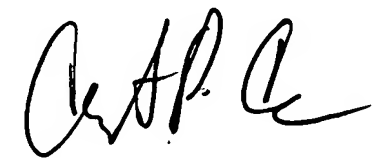
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joshua Bullock
Patent Examiner
A.U. 2169
07/08/2007

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